

A QUICK EDUCATION SECTOR ASSESSMENT

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GLOSSARY

AAA	Armenian Agricultural Academy
ATC	Agribusiness Teaching Center
AUA	American University of Armenia
AVAG	Armenian consulting firm preparing higher education reform proposals
CE	Council of Europe
CEP	Center for Educational Projects, MOES
CER	Center for Educational Reforms, MOES
CIS	Commonwealth of Independent States
DFID	UK Department for International Development
Diaspora	Armenians communities abroad
ECA	Bureau of Educational and Cultural Affairs
EF	Eurasia Foundation
EMIS	Education Management Information System
ELT	Elementary Level Training Program
EPEAS	Education, Poverty, and Economic Activity Situation Analysis
EPP	Educational Partnership Program
EU	European Union
FSA	Freedom Support Act
GOAM	Government of Armenia
GTZ	German technical assistance agency
IDA	International Development Association
IMF	International Monetary Fund
IT	Information Technology
ITC	Information Technology Council
IQC	Indefinite Quantity Contract
JFDP	Junior Faculty Development Program
KAC	Knowledge Assessment Center, MOES
Marz	Armenian province
MLT	Middle Level Training Program
MOES	Ministry of Education and Science
NGO	Non-Governmental Organization
OSI	Open Society Institute (Soros)
PH	Project Harmony
PRSP	Poverty Reduction Strategy Paper
SAC	Strategic Adjustment Credit
SEUA	State Engineering University of Armenia
SIDA	Swedish International Development Agency
SIE	State Institute of Economy
SMU	State Medical University
STD	Socially Transmitted Disease
TACIS	Technical Assistance/Commonwealth of Independent States

UNDP	United Nations Development Program
UNICEF	United Nations Children’s Fund
VET	Vocational and Technical Education
WB	World Bank
YSU	Yerevan State University

EXECUTIVE SUMMARY

The report begins with a brief description of the seriously deteriorated quality, relevance, and efficiency of the Armenian education sector, at all levels: Pre-school; General Education; Vocational and Technical Education; and Higher Education. Twelve years after independence, the country's education system is falling far short of what is needed to produce flows of trained human resources to support the nation's development strategy, which fundamentally depends for its success on the brains and skills of its people. It is also threatening to undermine social cohesion and the right of all Armenia's children and youth to participate in and contribute to the future of their country.

Next, the report summarizes the outlines of the responses to the challenges posed by this situation. The major initiative to date is the World Bank-assisted, \$20 million Education Financing and Management Reform Project, carried out between 1998 and 2002. This project established the legislative and policy base for General Education reform. It also took initial steps to strengthen the Ministry of Education and Science (MOES) to lead it, laid plans for rationalization of school facilities and staff, funded a major textbooks initiative, and experimented with new, decentralized, community-based school management and financing models. As a result of the last initiative, community-based and managed education has been placed at the core of the second, or follow-on, project, along with major initiatives in curriculum development, assessment, retraining of teachers, and the application of information technologies to teaching and learning.

The follow-on project is already underway, funded by a World Bank (WB) project preparation facility of \$1.2 million. The main funding will come on stream in late 2003 or early 2004 in the form of a four year, approximately \$19 million program entitled ARMENIA: Educational Quality and Relevance. The project is impressive. It has been carefully planned and developed, is conceptually sound, and enjoys the support of the government, the World Bank, and other donors.

On the other hand, the easy part – laying the groundwork for reform of general education – is over. The task now is to implement it, and to do so effectively. Implementation will be challenging, as the MOES is not yet equipped with the full range of people, skills, and systems it will need to get the job done. It is also the moment of truth for MOES, as it enters the phase where real, nation-wide decentralization of its powers is to take place. Significant provision has been made in the project's design to overcome these obstacles, in the form of technical assistance, training, and institutional development, but more is needed. The participation of donors other than the Bank is being sought to help fill gaps and, in

the process, contribute to capacity building. The only large buy-in reported till now, is a sizable EU initiative in vocational and technical education.

The process of addressing the also considerable higher education reform needs has lagged behind that in general education. However, a serious effort in that direction now is getting underway. The MOES and the principal state universities are taking the lead, with significant donor involvement to date by the World Bank and the EU. A draft higher education law has been prepared. A draft reform strategy paper is due to be completed in the next month or so. And a series of efforts to raise quality and harmonize Armenian higher education with that of EU countries, including adoption of standards that will give Armenia international recognition of its degrees, with obvious implications for international competitiveness, are getting underway.

The report goes on to provide an overall assessment of USAID's activities in education during the 1999-2003 strategy period. The principal conclusions from this quick review are: that, by and large, they reached their immediate goals, namely, to support achievement of the Mission's various strategic objectives; but that, as a group, they could have accomplished more, if they had been designed and conducted within a broader educational development strategy. Other USG-supported education activities, notably by ECA, are also described in this part of the report.

The core of the report is found in Section F, which discusses the case for USAID developing a modest, tightly focused education program to: 1) help guide and support the Mission's existing and future education work under the various SOs; and 2) develop and carry out a small number of additional, high priority education projects, within the general social transition framework. This section also outlines a possible strategic approach. The case is made that future USAID education activities should focus on general and higher education, and not on pre-school or vocational and technical education. A number of program options are offered for consideration in each of the former two areas. Issues of scale, possible program mechanisms, and management implications are also addressed.

The case for a greater USAID involvement in education rests, first of all on the symbiotic relationship between Armenia's human resource development, including the education of its children, to success of Armenia's development strategy and the fact that, as matters now stand, the trends are negative, not positive. The country is facing a growing educational deficit, and it is a matter of the highest priority that steps be taken to turn this around. Without progress in this area, it is difficult to predict the ultimate success of Armenia's social transition.

A second factor is that the ultimate success and sustainability of USAID's program strategy depends on human and institutional capacity building, in which education is and must play a significant part. For example, realization of

democratic governance objectives, much of the work in the social sectors, and a successful transition to a market economy depends in large measure on changing attitudes and behavior, a process that ideally should begin early and continue throughout life. And the success and sustainability of technical and other investments depends not only on the efforts of the people currently involved, but also on ensuring a steady flow of trained people to continue the work in the future. The Mission has shown that it shares this view by virtue of the limited, but significant education activities it has supported or is currently supporting.

A third part of the case is that, compared with the situation even a few years ago, the opportunities for doing effective work are greatly improved, as a consequence of the fact that a promising general education reform process enjoying broad national and international support is underway, and that the prospects that something similar will emerge in higher education are good.

Finally, USAID, given its already strong presence in Armenian development, is in a position to provide leadership, as well as to leverage other donor funds in education, with a relatively modest investment of its own resources. Numerous statements that USAID's presence would be of great help in sustaining the reform process were received in the course of the assessment.

The report concludes by recommending that:

1. USAID develop a small, targeted program in education to provide all the Mission's programs with expertise and support for their education-related work, maintain a watching brief on the sector, and develop and execute a limited number of high priority, targeted education activities designed to assist the long term sustainability of its work in Armenia.

Among the general education projects that should be given serious consideration are: a) the development and testing of curriculum modules in life styles, and applied economics; b) extending the reach of school computerization programs to those small and remote rural schools that are not covered by current WB-MOES plans; and c) development of remedial education and work-related skills training programs for unemployed, out-of-school youth. (See Section C, UNICEF, and Section F.)

In higher education, there are two high priority needs, which should be explored: a) development of an educational loan and scholarship program for disadvantaged youth and b) a program or programs to renovate teaching and research staffs and provide greater opportunities for younger scholars. In addition, it is recommended that the Mission continue and deepen its efforts to develop high quality computer sciences training and research in the three universities where it is currently working.

2. USAID use the opportunity offered by the creation of such a program to develop a working relationship with the MOES and other key educational institutions, as well as donors and, in effect, become a “player” in the sector.
3. In the first year of the new program, a \$1.5-2.0 million technical assistance and training package be approved to jump start the program and fund an education professional and support staff to help develop and execute it.
4. USAID, Public Diplomacy, and other USG agencies working directly or indirectly in education collaborate on a review of current and recent USG-assisted activities in education in Armenia, with a view to deriving lessons learned and developing a more coordinated strategy to guide future work in the sector.

QUICK EDUCATION SECTOR ASSESSMENT

A. Introduction

Following pre-strategy discussions in Washington in December 2002, USAID Armenia developed a scope of work for “A Quick Assessment of the Education Sector in Armenia”. The purposes of the assessment were to: provide the Mission with focused, up-to-date information on the current state of Armenian education, at all levels; identify potential areas of need not covered by other donors; and make recommendations to the Mission for a possible strategic approach to the sector.

Aguirre International was contracted by USAID to take responsibility for the assessment and selected Richard Dye, a broadly experienced international education specialist, to conduct it.

The work was carried out in Washington and Armenia between January 30 and February 26, 2003. More than 50 meetings were held with: the Ministry of Education and Science (MOES) and other Armenian education authorities, leaders, and experts; USAID, the World Bank (WB), the European Union (EU), and other key donors; Armenian Diaspora organizations; public diplomacy staff in the U.S. Embassy; representatives of international and local NGOs; a local, private consulting firm developing a higher education reform policy paper; and USAID contractors. (See list in Attachment 1.)

In addition, an extensive review was made of documents, reports, and other relevant material prior to and during the assignment, including recent assessments of the education sector in Armenia from pre-school through tertiary levels. (See list in Attachment 2.)

The report begins by defining and describing the major problems of the sector and outlining its principal needs (Section B). Section C outlines the steps that have been taken and are being taken, principally by the Government of Armenia (GOAM), the WB, and the EU, to address the situation. The activities of other donors and the environment for educational reform in Armenia are also discussed in Section C.

The next two sections (D and E) discuss USAID’s education activities during the 1999-2003 strategy period and the activities of other U.S. Government agencies in Armenia, respectively.

The following section (F) is the core of the report and presents the case for USAID working in education in Armenia, outlines a possible strategic approach to the sector, and discusses USAID’s comparative advantages, the assumptions underlying the report, and the management implications of the strategy. Recommendations are presented in Section G.

B. The Problem: Severe Deterioration of the Armenian Education System

The Armenian education system at all levels has seriously deteriorated, since 1991. Most seriously affected have been General, Vocational and Technical, and Pre-School education. In general, rural schools have suffered more than those in urban areas. Higher Education has been somewhat less impacted, but nonetheless has severe problems.

The severity and rapidity of the deterioration of what was by all accounts a strong education system in Armenia was the direct result of the collapse of major segments of the Soviet-era Armenian economy and financial and other difficulties resulting from the Nagorno-Karabakh conflict. The latter led to the closing of the country's borders with Azerbaijan and Turkey, with severe and continuing negative effects on the country's economy, and both led to large-scale emigration of hundreds of thousands of the population, including large numbers of children. But, even if these factors had not been present, the Soviet-style education system inherited by the new Republic of Armenia would have required major redirection and reform to support Armenia's transformation into a democratic, free market-oriented, and internationally competitive country.

The lack of an effective education system is of particular concern to Armenia because of the fact that the highly skilled and educated workforce that previously existed has been seriously reduced and rebuilding it is critical to the future development of a country with few resources other than its people. It is also undermining social cohesion and the right of all Armenian children and youth, including those in rural as well as urban areas, to participate in and contribute to the future of their country.

The availability of **Pre-School Education** has declined sharply since independence, and the sector no longer receives support from the central education budget. Community-supported nurseries or day care centers (ages 2-3) and kindergartens (ages 3-6) exist, but the numbers are inadequate and the majority of Armenian children effectively lack access to them. In addition, of course, there are a number of private pre-schools, which provide early childhood education for those who can afford it. The pervasive inequity that characterizes the Armenian education system, thus, starts from the beginning.

There are three levels of **General Education** (sometime called secondary education) in Armenia: Primary (grades 1-3); middle (4-8); and higher (9-10). In 1991, the decision was made to add, prospectively, an 11th grade for the students entering grade 1 that year, but there are currently no 11th grade classes.

Among the major problems in the general education sector are: inadequate financial support; generally weak MOES implementation capacity; grossly inadequate salaries, low quality and morale of teaching staff; the virtual absence of any in-service teacher training; outdated curricula and teaching methods; a dysfunctional pupil assessment system; severely inadequate provision of teaching materials; lack of access to new

information technologies; deteriorated physical plant; increasing inequity; declining internal efficiency (including surpluses of teachers, administrators, and facilities, as well as increasing dropout rates); and, by all accounts, low external efficiency, i.e. the economic and social value of its graduates. (See Section F, Goals, for additional comments on the efficiency of the system.)

Primary school enrollment is said to be in the 80-85% range, which is down significantly from virtually universal enrollment during Soviet times. Although there are no significant differences between boys and girls' enrollments, other inequities pervade the system. Students from low-income families entering first grade find themselves behind from the start, due to lack of pre-school education. Students in rural schools, especially the smaller and more remote ones, generally receive an education, which is of lower quality, with fewer days of instruction. And in all schools at all levels, differences in the students' family resources make a large difference. One reason for this is that free education no longer exists in Armenia. Families, whatever their income, are required to pay for uniforms, transportation, and school supplies, as well as a variety of special assessments throughout the year. The amounts involved are not great, but, taken together, they represent a significant expense for families with limited means, and there are reports that some children end up unable to attend school because their families cannot afford these costs.

A second and larger source of inequity is that, as the education provided is not adequate to ensure that most students are prepared to pass from one stage of education to another without special help, families are routinely required to pay for special tuition either by the teacher or someone else, if they want their children to move through the system successfully. The problem is aggravated by the fact that the teachers must find ways to supplement their salaries and thus may not be motivated to cover the whole curriculum during regular class time.

Enrollment in the **Vocational and Technical Education (VET)** system, theoretically consisting of a series of training options beginning in 8th grade and continuing through high school and an array of lower tertiary technical and pedagogical training institutes, has contracted significantly, since independence, i.e. from approximately 57,000 in 1991 to 25,000 in 2002. The major reasons are: the sharp drop in demand for its graduates due to the economic collapse; a decline in overall quality; the irrelevance of much of its offerings to the needs of the new market economy; and its inability to date to make required structural, curricular, staffing, and material changes. Another factor is the explosion of private universities, which has provided a socially more attractive outlet for youths that in earlier times might have ended up in the vocational/technical stream. Traditionally, the VET sector has been the least prestigious component of the system.

Paradoxically, although a number of schools at the preliminary or trades level have been closed, the total number of training institutions has increased, due primarily to political and other demands to open new facilities in different parts of the country, such as the border areas. The combination of decreased enrollment, a larger number

of institutions, and a general deterioration of quality, has rendered the system highly inefficient.

At present, much of the training provided is done in employer-provided facilities or on the job. There is also reported to be an extensive, informal apprenticeship system. A number of private technical training schools, e.g. computer, secretarial, and business skills, exist, but the number of students served is reportedly quite small and, because of their cost and concentration in urban areas, do not represent a viable option for most students.

Donor assistance to the VET sector has been limited up to now, with the EU and the German technical aid agency (GTZ) assisting small projects. However, this is due to change dramatically, with the EU's decision to make the sector one of their priorities. An initial two-year, three million euros EU/TACIS project recently was approved, which is designed to help establish a base for long term renovation of VET in Armenia. Among the reported components of the project are assistance for diagnostic studies, the establishment of new policy and legal frameworks, and development of standards and curricula. The arrival of a team of experts to do an initial needs assessment is imminent.

Dropouts

As a result of the weaknesses in general education, the increase in the costs of education for all students at all levels, and the absence of good educational opportunities in the non-academic track, increasing numbers of Armenian youth are reportedly leaving school early and either working in a variety of low-paid jobs or joining the ranks of the unemployed. This cohort of out-of-school and undereducated youth is a cause for concern, both economically and socially.

No one knows the exact number. It cannot easily be deduced from enrollment ratios, because many youths who are officially enrolled, especially in the higher grades, may not actually be attending school, either because they have dropped out or because their families have emigrated. But, by all accounts, it is large and growing and is adding to the already considerable national education deficit accumulated over the last 12 years. While the education reform, in time, should reduce the dropout problem, special education programs are needed to provide existing dropouts with remedial training and practical, market-ready skills.

After independence, the **Higher Education** sector, consisting then primarily of the state universities and independent research institutes, experienced the loss of a large number of its best teachers and researchers, especially the young ones, through emigration or departure to take up better-paid jobs outside the sector. This left the system with large numbers of less qualified, less motivated, and generally older staff, who are extremely difficult to replace. This, in turn, makes it very difficult for younger staff to find a foothold or, once incorporated, to get ahead. The system also suffers from outdated programs, curricula, teaching methods, and equipment and

severe shortages of books, teaching materials and access to new information technologies. As a result, its graduates, while generally better off than graduates of the private universities or those lacking higher education, are increasingly encountering difficulties finding suitable employment.

The Separation of Teaching and Research

One of the persisting features of higher education in Armenia inherited from the Soviet period is the sharp separation of teaching and research. While this is breaking down as the stronger state universities slowly develop graduate programs, it is still a big problem, and one that increases the difficulty of rebuilding and reorienting the country's science and technology capacity – a sine qua non of the country's high tech-oriented development strategy.

Finance

Higher education finance has undergone major changes. Where before the universities and the students were financed by the state, today government financing covers only around 30% of the budget of the state universities, with the remainder financed by tuition and, to some extent, by international grants and other subventions. In addition to the financial problems this creates for the institutions, the changes inevitably have produced changes in the student body, as more and more, poor and even middle class students who manage to somehow get through the inherently unequal admission system, are unable to afford the cost.

Private Universities

Meanwhile, demand for higher education remains high and as under the best of circumstances, only a small proportion of school graduates can obtain admittance to the state institutions, the result has been an explosion of private alternatives. Today, there are some 60-70 private universities, only some 15 of which are officially recognized. Some of these institutions are of low quality and reportedly amount to little more than diploma mills. Typically, however, they represent reasonably serious attempts to provide a decent education at a significantly lower cost than the state schools.

Most of the private universities concentrate on only a few academic areas, with the emphasis on those not requiring large investments in equipment and technology. Teaching staffs are largely part-time and typically state university teachers who are supplementing their meager incomes. The quality reportedly varies from fair to good. Because of their newness and the lack of regulation, they have the advantage of being able to be more flexible and, in some cases, more open to new ideas and methods.

There is little information available yet on what is happening to the graduates of the private universities. Anecdotal evidence suggests that probably less than half

currently are able to find employment in the areas in which they have specialized, but that they still fare better in the market than those without any higher education.

C. The Response: Promising Educational Reform Initiatives

Government and World Bank

In the period after 1995, GOAM education authorities, with assistance from donors, notably the WB, began to move from a posture of coping with educational emergencies to developing plans for transforming the educational system to better serve the nation and its economy. Out of this process emerged the first WB-assisted project in support of general education reform, entitled Education Financing and Management Reform Project. This was a five year program (1998-2002) with three main components: Textbook production and distribution; Capacity Building for Reform Management; and Support for Project Implementation (including the establishment of an implementation unit within the ministry: the Center for Educational Projects (CEP)).

Under the second objective, a legislative and policy framework was established, diagnostic studies were performed and plans developed to deal with some of the most critical issues. One was rationalization of schools and staff, in response to the surpluses of teachers, administrative staff, and facilities and the low student-teacher ratios. Another was the launching of a Pilot School Improvement Program, designed to experiment with decentralization of school management and finance to elected school councils.

The draft WB Implementation Completion Report for the project, which ended in 2002, concludes that it was satisfactorily completed and, importantly, that it laid a sound basis for a follow-on project to begin in 2003.

Planning and processing for the follow-on project, entitled ARMENIA: Educational Quality and Relevance, is nearly complete, and final approval is expected by the end of the year. As a Project Preparation Facility of \$1.2 million has been approved to bridge the gap between the initial and the follow-on project, in effect the new project is already underway.

The most recent information available indicates that the follow-on project will have five principal components designed to: develop a national curriculum to create the knowledge and competencies needed for the new economy; establish a new outcomes based assessment system to measure whether that is indeed happening; integrate information communication technologies into the teaching and learning system; modernize teaching practices; assist the MOES to deepen ongoing reforms for decentralizing school finance and management to community-based schools and improving the efficiency of the system; and assist the MOES in project management and implementation. The project is expected to run through 2007. The budget is not final, but reportedly will be approximately \$19 million, including counterpart and

IDA funding on the order of \$10 million. Parenthetically, the first project also was in the \$20 million range.

The donor situation

Besides the WB (and indirectly the IMF through the Strategic Adjustment Credits - SACs), the main education donors in Armenia are the EU, UNDP, UNICEF (especially important in early childhood education), and the Open Society Institute (OSI). USAID, the Department of State's Bureau of Educational and Cultural Affairs (ECA), and the Eurasia Foundation (EF) are also active, as described in Sections D and E.

The EU has made a radical change in its assistance orientation in Armenia. Its earlier priorities were institutional development, private sector, and infrastructure. The last two have been dropped, in favor of a focus on "helping the country cope with the social effects of the transition". Education is now one of the priority areas, with the focus on vocational and technical education, higher education, and information technology (IT). The new VET initiative has already been discussed in Section B.

The EU's decision to become involved in the higher education sector in a major way is due first of all to the fact that Armenia, as part of its campaign to join the Council of Europe (CE), has decided to develop its higher education system along European lines. At the same time, Armenia is seeking to increase its competitiveness by raising the standards of its degrees and securing their recognition internationally.

There are a number of activities already underway or in the works, with European cooperation. Among them are projects to: develop internationally accepted standards for Armenian degrees; a new, national, university accreditation system; and a credit transfer scheme designed, among other things, to encourage more international students to study in Armenia. Another potentially very important initiative is the proposed establishment in Armenia, with EU and CE help, of a Caucasus Regional University for Information Technologies. Reportedly, the new IT center will be associated with the French University in Yerevan. Both TACIS and bilateral mechanisms apparently are to be used.

UNDP's principal areas of work in Armenia include the environment, agriculture, economic development, and democracy and governance. It does not have a separate education program, but rather treats education as a cross-cutting issue. In spite of the absence of an education program per se, education activities are found within virtually all sector programs. For example, under the democracy and governance rubric one finds human rights, civics, and legal education projects, as well as related NGO development. In the environment area, the focus has been on assisting the GOAM to develop the legal and policy basis for a national environmental education program. A similar multi-donor effort in HIV/AIDS education, including USAID, is reportedly underway

A major supporting activity has involved cooperation with the GOAM in the creation of a social monitoring and analysis system to track key social indicators, including education. A recent study entitled Education, Poverty, and Economic Activity Situation Analysis report in Armenia 2002 (EPEAS), was conducted within the framework of this monitoring system and has played a key role in the preparation of the draft Poverty Reduction Strategy Paper (PRSP), which includes an important education section.

UNICEF's activities in Armenia to date have been focused on pre-school (ages 0-6) and primary (ages 6½-10) education. At the pre-school level, the emphases have been on home-based care for the youngest children and kindergartens for those fortunate enough to have access to them (less than 30% of all children in the age group).

Improvements in home-based care have been sought through a community-based system of parental training, starting with pre-natal care and continuing through start of school. A series of videos have been developed to support the training. As part of a new pilot effort along these lines, the Dutch reportedly are supporting five parent resource centers. Besides parental training, services include well-child care and immunizations. There is no immediate prospect, however, that the pilot efforts will lead to any increase in MOES attention to the pre-school area, as no budget provision for it exists or is in sight.

UNICEF's work at the general education level has focused on development and testing of a curriculum module in the area of "life skills". The decision to undertake this project several years ago was based on the fact that there were no curricular activities included in the first GOAM-WB project, so UNICEF decided to pilot some in its areas of interest. Among the topics covered in the module are: teamwork; discipline; coping skills; environment; safety; healthy life styles (including STDs and HIV/AIDS), and earthquake protection. The methodology is child-centered and participatory. In UNICEF's view, it is time now to incorporate the module in the new national curriculum and "take it to scale", i.e. implement it nationwide, but it does not have the resources to do so.

OSI. Education accounts for approximately 30-40% of OSI's program in Armenia. There is work at three levels: pre-school; general education; and higher education. A centerpiece of the effort at the first two levels is support for the work by the Step-by-Step Benevolent Foundation, and local partners, to introduce critical thinking methodologies, based on reading and writing, into Armenian education. This project, which mirrors similar efforts elsewhere in Eastern Europe and the CIS, is large in money and ambition and covers the whole country. Components include curriculum, teacher training, and materials development.

A second focus of the Society's work in general education has been in the area of community schools development. They feel that, starting four years ago, they pioneered the area in Armenia, and are gratified to see that the concept has taken root

in the new WB-MOES project and elsewhere. The primary mechanism used so far has been a series of small grants, which have supported multiple community models, responding to local initiatives and needs. The initial focus was on IT, but the concept has grown to cover a broad range of school development issues, as well as use of the schools as community resources and lifelong learning centers.

In the teacher training area, OSI is supporting three training centers. The emphasis is on IT, but some subject matter training is also included.

Their higher education work has focused on strengthening the policy framework for development, including such issues as access, admissions, standards, and credit transfers. In addition, they have helped develop a civics curriculum and the establishment of summer schools.

The Society's programs in Armenia are scheduled to terminate in 2005.

Bilateral Programs. In addition, there are a number of generally small bilateral programs in education. The British Department for International Development (DFID) does not work in education, leaving the field to the British Council, which is not involved in a major way, except in the English language area. (DFID's work on public administration reform, however, benefits public bodies in the education sector, such as the MOES, Marz level education offices, and local governments.) The Germans, through GTZ, have maintained an interest in vocational education and are said to be likely to be involved in higher education reform, as part of a broader European effort. The Swedish international Development Agency (SIDA) was involved in development of the Education Management Information System (EMIS) at MOES and has had a continuing interest in special education. The Dutch have done work in pre-school education.

Diaspora. The contributions of the Diaspora to general education, while substantial, have focused heavily (90 % by one estimate) on school renovation and construction and provision of furniture, materials, and equipment, including computers. Diaspora and local private sector investors, however, have helped finance the establishment of new private universities. Although no evidence was uncovered that the diaspora has so far been brought into the broader education reform process in a major way, there would seem to be good reasons to attempt to do so. One possibility, given the diaspora's apparent interest in strengthening Armenia's IT capacity, might be provision of computers to small and remote schools not included in current plans for the new WB-GOAM project.

Environment for educational reform

The education reform environment in Armenia is at once promising and problematic. It is promising in the sense that there is strong and so far consistent support for reform by both the executive and legislative branches, as expressed in the State Education Development Program, 2001-2005. MOES has exercised leadership and has been a

reasonably effective partner in the execution of the first WB general education reform project and in the design of the second. A cadre of capable, committed people is in place in the ministry. Work on higher education reform, while lagging behind general education, also seems to be getting underway. Budgetary allocations for education, while very low, have been modestly increased. And education appears destined to be an important component in the forthcoming poverty reduction strategy. (See the draft PRSP.)

It is problematic because what has transpired up to now in the general education area, besides the textbook project, has been the relatively easy part, e.g. planning and design work and pilot projects. Now it is crunch time, when such things as rationalization of schools and teaching staff; development and implementation of new standards, curricula, and methods; delegation of school functions to elected school councils on a national scale; teacher retraining; incorporation of new information technologies; and increasing equity within the school system must be implemented.

This agenda represents a major challenge for the MOES. The ministry's implementation capacity is limited, and that is likely to prove to be a major impediment. In addition, the next phases of the reform will require MOES to take politically sensitive steps, like closing or consolidating schools and reducing teaching and administrative staff. They also will demonstrate whether MOES is prepared, in the last analysis, to devolve real powers to community school councils.

The WB project includes a component for helping build the ministry's capacity; whether it will be enough, however, is uncertain. Donors undertaking specific projects within the context of the reforms must take this factor into account in project design.

Compared to other developing countries, in Armenia there is so far little indigenous civil society involvement in education, including advocacy work. Efforts to identify significant local education NGOs usually led back to the same short list of local affiliates of international NGOs.

D. USAID 1999-2003 Strategy Period

USAID's 1999-2003 strategy did not specifically address education. On the other hand, over the course of the period, a number of education initiatives were undertaken by various program sectors in support of their objectives. Notable in this respect have been the private sector, democracy, and social transition programs.

Examples include: The AUA endowment; civic education in secondary schools; a law faculty development program at Yerevan State University (YSU); development of accounting and audit curricula at YSU; development of a unified family medicine curriculum at the State Medical University (SMU); development of a business curriculum at the State Engineering University of Armenia (SEUA); the establishment of an accredited degree program in actuarial science at YSU; and

assistance for curriculum reform, adult education, and outreach programs of computer science departments at three universities: YSU, SEUA, and the State Institute of Economy (SIE).

Information on these programs and others was obtained from interviews with the activity managers and a few of the beneficiaries. Evaluation of the individual activities was not requested, and in any event the information that could have been obtained in the short time of the assessment would have been insufficient for that purpose. It was, however, enough to reach two general conclusions about the projects as a group.

The first conclusion is that by and large the education projects supported by the Mission appear to have been well designed and executed and their objectives seem largely to have been achieved or are in the process of being achieved.

The second conclusion is that the various activity designs do not appear to have been done within any common strategic framework. In a number of instances, for example, the initiatives seemed to have been designed quite narrowly, in the sense that they addressed a specific need in a specific institution, but did not attempt to use the project to leverage changes in the larger educational environment in which they operated. In other cases, significant attention was paid to the context within which the activity operated and efforts made to positively influence it. The latter should be the preferred approach and guidelines developed to promote it.

E. Other U.S. Government-Supported Education Activities

Department of State/ECA

Among current public diplomacy activities in Armenia are seven Freedom Support Act (FSA) activities in education. They include the Project Harmony (PH) School Connectivity Project, the Educational Partnership Program (EPP), the Junior Faculty Development Program (JFDP), the Elementary Level Teacher Training Program (ELT), the Middle School Level Teacher Training Program (MLT), Curriculum Development for Pre-Service Education, and Curriculum Development for School Administration Leadership Training.

PH is a program to provide connectivity, computers, and technical and training services to the schools, with links, as well, to the communities. The services are provided through a network of resource centers sited in nodal schools. Each center serves 3-5 neighboring schools. Centers generally have two trained staff members, a number of computer stations, Internet connection, other teaching equipment, such as LCD projectors, and a website. Teachers and students may use the centers for free during certain hours, and at other times, they are open to the community for a fee. Training is provided in Internet use, computer skills, PowerPoint, web design, and classroom use. Center unit cost is about \$17,000, excluding Internet connection fees.

Community outreach is done through a system of regional coordination teams, including community developers. Regional training centers are under development. The focus is on civics, democratic development, parenting, and leadership skills for women and girls.

ECA and the WB currently support the program. The Bank provides the equipment and ECA's support covers most of the rest of the cost. To date, starting in 2000, ECA has provided a total of \$8 million of largely earmarked funds. This includes a recent \$5 million grant for 2003 and 2004, following which ECA support is expected to decline. The number of centers now stands at 110, plus another 10 awaiting connection. A total of 320 are anticipated by the end of 2004. The project's current capacity is about 100 new centers per year. Reportedly, among the long term issues to be resolved over the next two years are increasing the project's impact on classroom teaching and learning and generating community and other income to sustain the centers.

The EPP funds partnerships between Armenian and U.S. universities. Six partnerships are active at the moment, and eight additional proposals are pending in this year's competition. Each partnership is built around specific Armenian university development objectives. Some of the areas currently being addressed are: development of economics and business curricula and related teaching methods; continuing education; faculty development in education, research, and policy analysis; entrepreneurial education; public administration; and journalism.

The JFDP is an 11 month, U.S.-based, non-degree training program for junior faculty that provides young Armenian academics with specialized professional education to be used, on their return to Armenia, to introduce new teaching methodologies and create curricula in their professional areas.

The remaining four projects are IREX-coordinated. The ELT and the MLT are focused on updating both the curriculum and training for in-service and pre-service elementary-level teachers in social studies and civics. The cornerstone of ELT has been the development and implementation of new teacher training manuals at both primary and middle school levels and covering the five basic areas of elementary education. The project is now involved in expanding the number of schools in the project, increasing distribution of the manual, and assisting with the creation of four regional training hubs.

The MLT program is centered on the development and implementation of three new texts: a guide for training middle school curriculum specialists; a middle school teaching methodology handbook; and a unit-planning guide, with sample course units.

The last two programs are extensions of ELT and MLT. The curriculum development project for pre-service education goes beyond training teaching staff at the pre-service

training institutions to improving the training of future teachers. Organization of an innovative mentor program for the students is included.

The curriculum development project for leadership training of school administrators, which is being conducted together with the Center for Educational Reforms (CER) of the MOES, focuses on the role of the school director as an educational leader capable of building – in collaboration with pupils, teachers, and parents – a safe and orderly environment in the schools. An educational leaders training guide and a series of training modules will be produced.

Eurasia Foundation

The EF traditionally has concentrated on democratic governance and free market issues in the CIS, and has not been involved extensively in education. In Armenia, however, they have been relatively active in the sector. Included have been such projects as: online civics education; textbook translations; and libraries (with OSI). A \$3 million IT project, focused on selected university faculties - journalism, economics, management, and computer sciences – is under development.

In a further education-related initiative, EF has established a Caucasus Research Resource Center in Armenia, to strengthen public policy research capacity, particularly in the social sciences. The foundation recently issued a tender for establishing an academic base for the center, which was won by YSU. Negotiations are currently underway for the center's move to the university.

The foundation recently decided to undertake pilot work in the area of community schools. Under a new project just getting underway, they are planning, through a competitive process, to make grants for the establishment of four regional resource centers, each serving five schools, to test innovative ways to involve the communities more effectively in the schools and vice versa.

USDA

USDA has had a long and close relationship with the Armenian Agricultural Academy (AAA) and, over the years, has supported a variety of education and training activities. Included has been establishment of an Agribusiness Teaching Center (ATC), which provides two years of English language, western-style instruction in marketing, finance, and management for 60 students, including summer internships between the first and second years.

F. USAID 2004-2008 Strategy Period

The rationale for working strategically in education

The case for a greater USAID involvement in education rests, first of all on the symbiotic relationship between Armenia's human resource development, including the

education of its children, to success of Armenia's development strategy and the fact that, as matters now stand, the trends are negative, not positive. In education, the country still faces a growing deficit, and it is a matter of the highest priority that steps be taken to turn this around. Without progress in this area, as well as others, it is difficult to predict ultimate success of Armenia's social transition.

A second factor is that the ultimate success and sustainability of USAID's program strategy depends on human and institutional capacity building, in which education is and must play a significant part. For example, realization of democratic governance objectives, much of the work in the social sectors, and a successful transition to a market economy depends in large measure on changing attitudes and behavior, a process that ideally should begin early. And the success and sustainability of technical and other investments depends not only on the work with the people currently involved, but also on ensuring a steady flow of trained people to continue the work in the future. The Mission has shown that it shares this view by virtue of the education activities it has or is currently supporting, though without a coherent education strategy.

A third part of the case is that, compared with the situation even a few years ago, the opportunities for doing effective work are greatly improved, as a consequence of the fact that a promising general education reform process enjoying broad national and international support is underway, and that the prospects that something similar will emerge in higher education are good.

The core of any strategy should be support of activities that contribute to building long-term education capacity, thus making a permanent addition to educational assets in the country and in the process fostering sustainability. The distinction between training and education is often difficult to make, but essentially, training, even when institutionally based, tends to be short-term, focused, specific, and instrumental. Educational development, on the other hand, typically involves creation of the means of producing a permanent flow of trained human resources in particular professional and technical areas.

Needs and Options

The main needs of the education sector, at all levels, are to: 1) improve the quality, relevance, and efficiency of education services; 2) provide more equitable educational opportunities for Armenian children and young people; 3) improve employment opportunities for graduates; and 4) increase the engagement of parents, communities, the private sector, and the society at large in assuring that educational goals are met in a fair, equitable, and effective way.

USAID could make an important contribution to achieving these goals through a strategy of assisting high priority education projects, which are focused on providing needed technical assistance and training inputs and linked to other USAID objectives.

In addition, USAID's active, even if relatively limited presence in the sector, would contribute significantly to sustaining the Armenian commitment to educational reform, help leverage the funds of other donors, and provide opportunities for the reform efforts to draw on the extensive U.S. and USAID experience and major technical resources in the sector.

Elements of a possible strategic approach

Goals

Two core goals are suggested. The first is improvement of the quality, relevance, and efficiency of educational services in areas of special interest to USAID. The second is improved impact, performance, and sustainability of USAID's investments in education.

As noted earlier, the quality of Armenian education at all levels is poor. Its relevance to the needs of an independent Armenia struggling to develop a democratic, productive, internationally competitive, and socially secure society is low. And, it is extremely inefficient. The inefficiencies are internal, that is, the system is characterized by poor deployment and use of the system's resources (money and human and physical assets) and by inadequate impacts of those resources on student achievement and, in the case of higher education, the production of knowledge. The inefficiencies are also external, i.e. the quality and relevance of the system's products, and thus their social and economic value, is low. Improvements in system efficiency of both kinds would help make limited education budgets go farther.

The previously cited examples of successful education projects during the past strategy period (See D. above) illustrate how carefully targeted, well-designed education activities have and can support the realization of Mission objectives. The impact of these interventions can be increased by the existence of targeted initiative to strengthen the surrounding human and institutional structure.

Sub-Sector Choices

For reasons of opportunity, comparative advantage, and the existing or projected activities of other donors, it is believed that USAID should focus its attention on one or both of two sub-sectors - General Education and Higher Education – and eschew activities at this time in Pre-school and Vocational and Technical Education.

The current situation of the pre-school system is precarious and the needs are great, but there do not appear to be any strategic points of entry, nor is it a current government priority. The situation in vocational and technical education is also currently extremely poor and it is a government priority, but there is a major donor presence coming into this area, namely, the EU. Therefore, there is no evident need for USAID involvement.

General and higher education, on the other hand, are clearly on the government's reform radarscope and while donor interest, notably the WB, is substantial in both sectors, there are a number of uncovered, high-priority needs. (See below.)

Approach

A partnership approach with the MOES, educational institutions, and other stakeholders would be essential to the effectiveness and success of even a modest education program. Both formal mechanisms, e.g. a Memorandum of Understanding with MOES, and informal methods, such as working groups of stakeholders, should be considered.

Technical assistance and training should be at the heart of activity design. Foreseeable USAID resources do not appear sufficient to consider major expenditures for operational costs of reforms and probably only a few targeted, high priority opportunities for provision of equipment and materials. In any case, the most critical financial needs should be met by the new World Bank credit and a related modest but significant increase in the national education budget.

Options in General Education (Grades 1-10)

In this section and the following one on higher education, a number of optional program concentrations are discussed and offered for consideration. They are all of great importance and together form the heart of the proposed reform of the schools. They are not necessarily equal in their potential attractiveness to USAID and vary in their need for additional donor support, but each offers significant opportunities for USAID involvement, if desired.

Policy and Strategic Planning

Up to now, the principal donors at the education reform table have been the WB, UNDP, and the EU. Most bilateral and other, smaller donors, in general, have been instrumental on policy only in the specific areas where they work. If USAID were to decide to develop an education program, it could and hopefully would wish to position itself at the higher level to facilitate its own work, provide support and encouragement to the overall effort, and help keep the reform momentum on track.

Standards and Curriculum

The general education reform program includes a comprehensive effort to establish the goals and standards for Armenia education, which will set the overall framework for further work. Expert advice could usefully be provided on the process and on different sets of international standards that could be applied to different areas of the curriculum, leaving resolution of the wide variety of underlying sensitive, national issues to the Armenians.

A comprehensive reform of the curriculum is also planned, with the overall goal being to modernize both content and teaching methodology, in line with current child-centered and outcomes-based principles. Logically, this should follow the establishment of goals and standards, but in practice the two will be done simultaneously. Indeed, curriculum development, a process expected to continue through at least 2007, is already getting underway with WB help. There does not appear to be need for any other major donor help with the overall effort, but there may be needs and opportunities for work on specific parts of the curriculum.

For example, USAID and ECA have in recent years assisted with the development of curriculum modules in areas of USG interest, including civics, human rights, social studies, and the use of information technology in teaching and learning. The purpose has been to contribute to long-term sustainability of major USG goals. It would be useful to systematize and coordinate these efforts. Efforts could be made, as well, to seek to incorporate within the curriculum other modules of possible interest to USAID, e.g. life skills, along the lines of the model piloted by UNICEF, and applied economics, such as the Junior Achievement work in entrepreneur training and preparation of youth for participation in a market economy.

Assessment

The introduction of a modern system of student, teacher, school, and system assessment and the development of supporting human and institutional capacities is a critical need. There is little or nothing to build on, and work in this complex and highly technical area will need to start virtually from scratch.

The new WB project, however, includes a significant component in this area, including technical assistance and training support for the establishment of a new semi-autonomous Knowledge Assessment Center (KAC) under the aegis of the MOES. Under the circumstances, this seems to be an area in which USAID could wait and see if important uncovered needs arise down the line.

Teacher Training

The main teacher-training component in the new World Bank project is the development of a national system of in-service training. Included are plans for the creation of a semi-autonomous, national in-service training center, based on an existing center in the MOES. The new center will inherit existing MOES training branches at the province (Marz) level, and will be responsible for executing, between 2004 and 2007, an ambitious and relatively expensive countrywide program of retraining of teachers, linked to the proposed curricular and methodological reforms. Distance learning components are to be included to facilitate the training and lower the cost.

According to MOES sources, there will be money in the new project sufficient only to cover the costs of the establishment of the new center and an initial round of training

for the teachers. If so, sustaining the effort on a national basis may prove to be difficult.

Developing a similar effort to reform pre-service training institutions is not in the current plans. Though it also is badly needed, it is not deemed to be as urgent a priority, especially because of the current surplus of teachers and the fact that a high proportion of pedagogical graduates, said to be more than a half, do not, in fact, go into teaching.

Given the WB interest and the fact that the “gap” is largely financial rather than technical, it would not be advisable for USAID to become involved in the system-wide teacher training effort. USAID should be prepared, however, to support such specific teacher training as may be called for as part of the design of particular activities it decides to support.

Information Technology

Under the reform plan, computerization of all schools with more than 300 students is to be completed by 2007. By computerization is meant not only the availability of computers and internet connections, but also computer skills training for students and teachers and the development and use of educational software to support the curriculum and new teaching methods. A national Information Technology Council (ITC) will be created to provide policy guidance.

According to the WB, there is an approximately \$3 million funding gap in this area, the most important of which is the lack of funds to extend computerization to schools with enrollments under 300, which includes a high proportion of rural and remote schools, including those where teachers are required to teach multiple grades. This gap, which is both technical and rural-urban in character, clearly has significant quality and equity implications.

The question was raised whether USAID might be prepared to help with this problem, either through further expansion of PH, which is highly regarded, or something like it, to reach all or some of the schools that will otherwise not be included. No answer was given, but it appears to be an area in which a unique and important contribution could be made to the reform effort, though it would not be cheap, even should the WB cover the equipment cost. On the other hand, it would be essentially a one-time investment, as operating and maintenance costs are to be covered from counterpart funds.

School Decentralization and Governance

The reform program calls for the extension of school management reforms, which were tested during the recently completed WB project, to all schools by 2004. The core of the reforms is the decentralization of control over a number of schools functions to local school councils and directors, accompanied by a lump sum budget

based on enrollment. Included are important elements of community mobilization and involvement in the schools, including fundraising. Clearly, important democratic governance, as well as education issues is involved in this part of the reform.

The new project has a technical assistance budget to support decentralization. Overall, there does not appear to be a need for USAID involvement on the education side, which has already been thoroughly piloted, but the community development component might be of interest. As noted earlier, the Eurasia Foundation is initiating a new project in community schools, and OSI has also been active in this area.

Education Programs for Out-of-School Youth

It has been noted that there is a growing number of out-of-school youth. These young people have left the formal education system for economic reasons, as well as the absence of suitable educational alternatives. There is a need for programs to reach and provide remedial education and practical, job-related skills to these young people. A study of the size, characteristics, needs, and locations of these youths would first need to be conducted, to provide a sound basis for program development. The study also should address the question of whether there are sources of funding available in addition to or in lieu of USAID, e.g. the EU or the Diaspora. Such a program might best be implemented by an NGO or NGOs. In the process, it could help strengthen NGO involvement in education in Armenia.

Options in Higher Education

For the purposes of this study, the higher education sector in Armenia includes both state and private universities and the state research institutes. It does not include the technical schools, which operate at a level approximately equal to junior colleges and constitute the apex of the vocational and technical education system.

The higher education reform process is much less advanced than in the case of general education. Currently, the same education law governs the universities as the lower schools. A draft higher education law has been prepared and circulated, but not yet passed. In the interim, in an attempt to move things along, the MOES has commissioned a study of the sector and reform needs, which is due to be presented sometime in the next month or so.

In the short run, USAID should monitor the situation to determine whether an attractive and feasible reform package emerges. If it does, there could well be a number of interesting opportunities closely related to USAID interest. The following list reflects, in part, confidential conversations with the consultants, AVAG Solutions, who are conducting the afore-mentioned higher education reform study.

Policy and Strategic Planning

As the higher education policy and planning process is less far along, USAID participation could have a larger impact than in the case of general education. The major donors currently involved are the WB and the EU. The latter is important, because Armenia, as part of its efforts to increase its competitiveness by raising the standards of its degrees and having them recognized internationally, has taken the decision to develop its higher education system along European lines. As a result, there are a number of projects underway or in the works, with European cooperation.

Among them are projects to develop: standards for Armenian education degrees; a new, national, university accreditation system; a credit transfer scheme; the establishment in Armenia, with EU help, of a Caucasus Regional University for Information Technologies; and programs to attract more international students to study in Armenia.

The EU interest in restructuring Armenia higher education is a positive development. But, at best, it will not cover more than a fraction of the Armenia higher education institution's needs, one of which, parenthetically, is to continue to have access to U.S. models and resources.

Targeted Activities in Support of USAID Objectives

The option here is to continue to do the kinds of things USAID has been doing in the universities, i.e. assisting to develop education and other programs designed to support its ongoing programs, such as the family medicine curriculum in the SMU and the computer science programs at three other universities. Projects of this kind should continue, as opportunities present themselves, but within a broader framework designed to maximize sustainability and impact. In this regard, consideration should be given, as appropriate, to encouraging and facilitating the establishment of additional university affiliations, through either AID or ECA mechanisms.

Student Loan and Scholarship Program

One of the more interesting issues in the debate over higher education reform in Armenia is the question of student finance. At present, the system is highly discriminatory and unfair. One result is that university student bodies are increasingly elitist. Another is that financial aid opportunities for poor students, even if they somehow manage to complete general education and find their way through the inherently inequitable admissions process, are very limited. The current system of State Order, a partial, government tuition subsidy scheme theoretically tied to labor market needs, is essentially dysfunctional and reportedly rife with corruption. One of the things that might come out of the proposed reform is the abolition of State Order and its replacement by a system of student loans and scholarship, designed to level the admissions playing field and provide financial help to needy students.

It goes without saying that this is an area that the U.S. knows a great deal about. It is also one where the greatest needs would be for technical assistance and training, not money for scholarships or loans, which, given the amount of money needed, would need to be financed by a long-term concessional loan from IDA or other sources. The equity implications are obvious, and, should the idea become policy; the payoff could be relatively quick.

Renovation of Academic Staff

The issue here, as previously noted, is the fact that after the loss to emigration over the last decade of many of the best Armenian academics, the remaining faculty are, as a group, less qualified, stuck in their ways, and hard to remove. As a result, the opportunities for up and coming young scholars, which the universities badly need to incorporate, are limited, and their absence, leads many of them to drift off to the private sector or to leave the country themselves.

One of the possibilities is that, as part of the reform process, there will be an effort to find a way to offer the older professors an honorable and economically viable way to move to emeritus status, without severing relations with their universities, possibly combined with a process for re-certification of faculty qualification. If a promising initiative emerges along these lines, USAID technical assistance to help design such a program could be useful and timely. The costs, again, probably would need to be financed by the WB or, conceivably, the EU.

Success of such an initiative could rapidly improve the quality of teaching, enhance the prospects for development of graduate programs and research, and, by opening the way for new blood, provide important impetus to reform.

Relevant Curricula and Programs

Armenian universities, on the whole, continue to offer curricula and programs developed during Soviet times, which no longer meet the needs of the new Armenian economy or contribute to the country's goal to become more competitive internationally. There is a great need for development of more relevant, market-oriented programs and curricula of the kind that USAID has assisted in such areas as law, accounting, auditing, actuarial science, and computer sciences. These projects, as well as others financed by other donors, are providing valuable models, which, in the context of a larger reform process, in time should have system-wide effects. They also should improve the employment prospects of university graduates.

Technical assistance to pull the various experiences together and derive the lessons and best practices from them could make a valuable policy contribution at this early point in the reform process. Such an effort also should produce useful ideas for focusing future USAID university-based activities.

The computer sciences area is of particular importance and, as USAID already has made a strong start and has a strong presence in this area, it is an attractive candidate for continued and deepened work. The ultimate goal should be development of as near to world-class teaching and research capacity as possible. Close coordination with the MOES and other donors, especially the EU, would be important.

Graduate Education and Research

Armenia's once proud and productive research establishment and related graduate education is in poor shape. The reasons, as noted earlier, include loss of many of the best faculty members, lack of opportunities for young people, deterioration of physical capital and equipment, and lack of relevance to the new Armenia of much of existing research and graduate training. If Armenia's products, whether manufacturing, agricultural, information technology, bio-technology, or other industries and services are to become competitive and ultimately reach their full potential, the country's advanced training and research capacity eventually will need to be rethought, restructured, and rebuilt.

To date, in spite of the interesting work currently being done in economics, USAID appears to have done relatively little in the research area. It would appear to be something which should be considered, particularly in areas of USAID interest, e.g. in computer sciences, after the appropriate groundwork has been laid.

Resources and Mechanisms

With the exception of support for the computerization of some or all of the MOES schools with enrollments under 300, pursuit of the options identified above that would not be financed by the other sectors would involve primarily technical assistance and training. Leaving the IT option aside and assuming that the Mission would wish to start on a relatively small scale at first, it is estimated that an effective, base level program could be mounted at a cost of approximately \$1.5 million to \$2.0 million per year. Unusually attractive education projects also should be able to compete for any strategic reserve or fallout funds.

Base level resources should be sufficient to fund three to five initiatives annually. Obviously, each initiative undertaken would need to be fully funded at the outset, to avoid a pipeline problem. It might make sense, at least for the first year, for the funds to be combined in a flexible technical assistance and training line item to be drawn down as needed, perhaps through selected IQCs, to respond promptly to attractive program opportunities as they are developed.

USAID comparative advantages

USAID is the first or second largest international donor in Armenia, as well as an arm of the world's only superpower. This gives it unique status and influence, which can be employed in a variety of sectors without being diminished. The exploitation of

this advantage would not necessarily require a large commitment of resources, though a few chips, at least, would need to be brought to the table.

In the education area, USAID can call on probably the world's largest pool of educational development experience and technical and training resources, including the sizable AID experience in basic education worldwide.

Compared to the other main players, USAID has the capability of responding relatively quickly and effectively to new or unexpected opportunities.

Assumptions

Three assumptions underlie the report, especially the recommendations. One is that the legislative, executive, and ministry support for the reform programs remains strong. The second is that government commitments to gradually increase the education budget over the life of the new project are met. The third is that the WB, EU, and others continue their political, technical, and financial support to the reforms. If these commitments continue, the overall situation will be promising.

Management implications

As the Mission does not have any education staff at present, it would be necessary to add an education professional to the in-house staff, with insights and experience system wide. This person preferably should be Armenian, to further enhance the Mission's capacity to understand and gain access to the sector. At least a half-time education assistant would also be needed.

A new education program preferably should be located within one of the line program units.

G. Recommendations

1. That USAID develop a small, targeted program in education to provide all the Mission's programs with expertise and support for their education-related work, maintain a watching brief on the education sector, and develop and execute a limited number of high priority, targeted education activities designed to assist the long term sustainability of its work in Armenia.

Among the general education projects that should be given serious consideration are: a) the development of curriculum modules in life styles and applied economics; b) extending the reach of school computerization programs to those small and remote rural schools that are not covered by current MOES plans; and c) development of remedial education and work-related skills training programs for unemployed, out-of-school youth in rural as well as urban areas.

In higher education, there are two high priority needs, which should be explored: a) development of an educational loan and scholarship program for disadvantaged youth and b) a program or programs to renovate teaching and research staffs and provide greater opportunities for younger scholars. In addition, the Mission's efforts to develop computer sciences teaching and research in YSU, SEUA, and SIE should be continued and deepened

2. That USAID use the opportunity offered by the creation of such a program to develop a working relationship with the MOES and other key educational institutions, as well as donors and, in effect, become a "player" in the sector.
3. That in the first year of the new program, a \$1.5-2.0 million technical assistance and training package be approved to jump start the program and fund an education professional and support staff to help develop and execute it.
4. That USAID, Public Diplomacy, and other USG agencies working directly or indirectly in education collaborate on a review of current and recent USG-assisted activities in education in Armenia, with a view to deriving lessons learned and developing a more coordinated strategy to guide future work in the sector

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Attachment 1

List of Contacts

	Thursday, January 30	
	USAID/W	William Douglass, Social Trans. Team Leader, Luba Fajfer, EGAT (assigned to EE) Liz McKeon, Social Trans. Team Ron Raphael, EGAT Jeannie Briggs, Armenia Desk Officer
	World Bank	Toby Linden Kari Hurt

	Tuesday, February 4	
10:00am	USAID, 18, Baghramyan, Tel: 529975/528015	Tracy Thoman, Program Officer
3:30pm	USAID, 18, Baghramyan, Tel:	Yester Hakobyan, Information Assistant/Translator/Interpreter

	Wednesday, February 5	
9:00am	Eurasia Foundation, 4, Demirchyan, 375002, Tel: 586059, 565478, 586159	Hrachya Kazhoyan, Senior Program Officer, Sona Hamalyan, Deputy Director, Heghine Manasyan, Director of Research Resource Caucasus Center
1:00pm	Interlingua University, Pushkin 21, Tumanyan 42 (branch) Tel: 586072	Ivetta Arakelyan, Rector
4:00pm	Center for Education Projects, 73, Vratsyan, Yerevan, Tel: 575690, 09412490	Karine Harutyunyan, Director

	Thursday, February 6	
11:00am	Ministry of Foreign Affairs, GOAM, Republic Square, Government House 2, 375010, Tel: 583978	Jivan Movsesyan, Executive Secretary on Relations with Diaspora
3:00pm	Open Society Institute Apt.2, 1 House, Pushkin Str, 375010, Tel: 542119, 541719, 543901	Larisa Minasyan, Executive Director, Armine Tadevosyan, David Amiryan, Deputy Director For Programs, Anahit Papikyan, External Education Public, Health Programs Coordinator

	Friday, February 7	
10:00am	US Embassy, 18, Baghramyan, Tel:	Hasmik Mikayelyan, Cultural Affairs Assistant
12:00am	UNDP, 14, Liebknecht str., Yerevan 375010, Tel: 560212	Armine Halajyan, Information Assistant, UN Department of Public Information

2:00pm	IREX, Khanjyan 50, Tel: 575336, 571896, 563781	Kelly Bedeyan, Country Director, Anush Davtyan, PTD Program Manager
4:00pm	British Council, Charents 28, Yerevan, 375025, Tel: 559923	Roger Budd, Director, Anush Shahverdyan, Projects Manager
4:30pm	USAID, 18, Baghramyan, Tel:	James Van Den Bos, Director, DSRO, Michael Blackman, Acting Director, EREO, Bella Markarian, Project Mgt Specialist, Tracy Thoman, Program Officer, Yeva Hyusyan, Program Dev. Specialist

	Saturday, February 8	
10:30am	Institute of Foreign Languages, Tumanyan 42, Yerevan 375002, Tel: 530552, 530711	Suren Zolyan, Rector
2:00pm	Social Investment Fund of Armenia, 6th floor, 31, Ulnetsu Str, Yerevan, 375037, Tel: 247123	Ashot Kirakossyan, Executive Director, Albert Stepanyan, Head of Training and Technical Assistance Coordination Unit

	Monday, February 10	
10:00am	MOES, 13, Khorenatsi Str., Yerevan, 375010, Yerevan, Tel: 580302	Aida Topuzyan, Deputy Minister
12:00am	UNICEF, 14, Liebknecht str., Yerevan, 375010, Tel: 523546	Marina Shukhudyan, Assistant Project Officer, Education
2:00pm	MOES, 13, Khorenatsi Str., Yerevan, 375010, Tel: 589735	Aram Kossyan, Head of the Scientific and Pedagogical Training Department
4:00pm	USAID, 18, Baghramyan, Yerevan, 375019, Tel:	Keith Simmons, Director, Carol P. Flavell, Deputy Director, Bill Douglass, Social Trans Team Leader, AID/W
5:00pm	US Embassy, 18, Baghramyan, Tel.: 524661	Kimberly Hargan, Public Affairs Officer, Hasmik Mikayelyan, Cultural Affairs Assistant

	Tuesday, February 11	
10:00am	UNDP, 14, Liebknecht str., Yerevan, 375010, Tel: 566073	Anahit Simonyan, Programs Manager
12:30am	State Engineering University of Armenia, Teryan 105, Yerevan, 375009, Tel: 525726	Yuri Sargsyan, Rector
2:00pm	Center For Educational Reforms, 67, Tigran Mets Str., Yerevan, 375005, Tel: 572100	Viktor Martirosyan, Director
3:30pm	European Union, 13, Mashtots Ave., Yerevan 375002, Tel: 530241, 531899	Sebastien Dubost, Head of Delegation, Irina Movsesyan, Task Manager
5:00pm	Junior Achievement, Abovyan 39, Yerevan, 375009, Tel: 566750, 09407932, 09408933	Armine Hovhannisian, Executive Director

	Wednesday, February 12	
10:00am	Yerevan State University, Alek Manukyan Str.1, Yerevan, 375049, Tel: 554629	Radik Martirosyan, Rector
12:00am	National Assembly, Commission on Education, Culture, and Youth 19, Baghramyan str., Yerevan, 375019, Tel: 588331, 524722, 09406719	Shavarsh Kocharyan, Head
1:30pm	MOES, Khorenatsi str, 13, Yerevan 375010, Tel: 580126	Robert Stepanyan, Head of Inspections Department
3:00pm	World Bank, 9, Vazgen Sarkissyan, Yerevan, 375010, Tel: 523992, 09411672	Susanna Hayrapetyan, Operations officer
5:00pm	Academy for Educational Development, Aygedzor 10, Yerevan, 375019, Tel: 221048, 225636, 266936	Richard Shortlidge, Director
6:15pm	Project "Harmony", 45, Sevastopolyan, Yerevan, Tel: 260687	Siobhan Kimberly

	Thursday, February 13	
12:00am	18, Baghramyan, Tel:	John Caracciolo, SME Advisor
1:00pm	18, Baghramyan, Tel:	Haikanush Bagratunyan, Project Management Specialist
1:30pm	18, Baghramyan, Tel:	Dianne Avetyan, Project Management Specialist
3:00pm	18, Baghramyan, Tel:	Maureen Esler, Social Sector, Anna Grigoryan, Project Management Specialist, Edna Jonas, Health Specialist
5:00pm	"Hayastan" All Armenian Foundation, Hanrapetutian Square, Government House 3, 2nd floor, Yerevan, 375010, Tel: 520940, 560106	Vahan Ter Ghevondyan, Executive Director

	Friday, February 14	
10:00am	18, Baghramyan, Tel:	Tracy Thoman, Program Officer
11:00am	18, Baghramyan, Tel:	Dianne Cullinane, Civil Society Specialist
12:00am	World Learning, 24/1, Moskovyan Str., Yerevan, Tel: 582620, 520851, 543576	Jan Karpowicz, Chief of Party, Marina Hajinyan, Associate Director for Programs
2:00pm	USAID, 18, Baghramyan, Tel:	Nune Mkrtchyan, Project Management Specialist
3:00pm	USAID, 18, Baghramyan, Tel:	Maya Barkhudaryan, Project Management Specialist
3:30pm	USAID, 18, Baghramyan, Tel:	Bella Markaryan, Project Management Specialist

	Saturday, February 15	
11:00am	MOES, 13, Khorenatsi, Yerevan, 375010, Tel: 524684, 09418563	Nerses Gevorgyan, Assistant to the Minister of Education and Science

	Monday, February 17	
9:30am	State Pedagogical University, Khanjyan 13, Yerevan, 375010, Tel: 526401, 520413, 522775	Artush Khukasyan, Rector
10:45am	Anania Shirakatsi University of International Relations, 65A, Tigran Mets, Yerevan 375005, Tel: 57 31 81, 571822	Vakharshak Madoyan, Rector
12:00am	NGO Training and Resource Center, Yeznik Koghbatsi str.20, Yerevan, 375010, Tel: 539204, 544012, 544013, 09416232	Margarit Piliposyan, Director
13:30pm	MOES, 13, Khorenatsi Str, Yerevan 375010, Tel: 524777	Karen Melkonyan, Head of Division
3:00pm	Hazarashen Social Ethnographic Armenian Center, Apt. 14, 62, Pushkin str., Yerevan, 375002, Tel.:586528	Hranush Kharatyan, President

	Tuesday, February 18	
10:30am	Avag Solutions, Apt. 34, 5, Vandanants Str. Yerevan 375010, Tel: 529003, 09407060	Vahram Avanesyan, Chairman&CEO, Levon Barkhudaryan, Senior Adviser
12:00am	MOES, 13, Khorenatsi, Yerevan, 375010, Tel: 524749	Norair Khukassyan, Head of the General Education Department
3:00pm	Step by Step Benevolent Foundation, Apt 20, Gjulbekyan 31, Yerevan 375033, Tel: 226996, 220442	Ruzanna Tsarukyan, Executive Director
4:30pm	University of National Economy, 128, Nalbandyan Str., Yerevan 375025, Tel: 521720, 528864, 585295	Armen Chughuryan, Head of Education Reforms and Foreign Relations Department

	Friday, February 21	
10:00am	American University of Armenia, 40, Baghramyan Str, Yerevan 375019, Tel: 512505, 512525, 512727	Harutium Armenian, President, and Steve Maradian, Vice-President

5:00pm	Armenian National Observatory, Tel: 524809, 538871	Aram Avagyan, Director (Head of the Department of Vocational Education in the MOES)
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	Monday, February 24	
2:00pm	USAID Mission, 18, Baghramyan, Tel:	Keith Simmons, Director

Attachment 2

List of Source Materials

1. Education, Poverty and Economic Activity in Armenia/Situation Analysis Report in Armenia/Yerevan, November, 2002/88p.
2. National Assessment Report/ Republic of Armenia/World Summit on Sustainable Development/Johannesburg, 2002/83p.
3. Millenium Development Goals 2000
4. Surveillance in the Republic of Armenia 2000-2002, Yerevan 2002, 206p.
5. Armenia/NGO Center Assessment/NGO Strengthening Program/World Learning, Armenia/Yerevan 2001/66p.
6. World Learning/Armenia/NGO Strengthening Program/Booklet/4p.
7. Law of the Republic of Armenia/Education Development State Program of the Republic of Armenia for the Period of 2001-2005/Yerevan 2000/34p.
8. Public Spending on Education in the CIS-7 Countries: The Hidden Crisis/Nicholas Burnett, Rodica Cnoblach, WB Consultants/January 20-22, 2003/30p.
9. TACIS National Action Program 2002/2003/Armenia/Support to the Development of Integrated VET System/Ministry of Education/2p.
10. Armenian Social investment Fund/Brief Review/December 31, 2002/5p.
11. Implementation completion Report on a Loan/Credit/Grant to Armenia for an Education Financing and Management Reform Project/Document of the World Bank/For Official Use Only/01/29/2003/57p.
12. The Armenia Education System/Public Expenditure Review/Draft/Sue E. Berryman, Vahram Avanesian, Levon Bakhudaryan, Zhora Asatryan, Gayane Avanesyan And William M. Tracy/May, 2002/67p.
13. Evaluation of USAID/Armenia's Social Transition Program (STP)/MSI/October 2002/72p.
14. Master Report (Revised Complete Draft)/December 31, 2002/ Submitted by: Tonya Himelfarb/31p.
15. Poverty Reduction Strategy Paper/Draft/ Yerevan, October, 2002/137p.
16. Fostering the Community Schools Movement in Armenia: A Concept Paper/Final Draft January 29, 2003/ Hrachia Kazhoyan, Eurasia Foundation/15p.
17. Education For All/National Report/Yerevan 1999/56p.
18. Hayastan All Armenian Fund/ Himnadram/1992-2002/24p.
19. From Transition to Partnership/ A Strategic Framework for USAID Programs in Europe and Eurasia/ December 1999/8p.
20. Education Financing and Management Reform Project/October 28, 1997/ Staff Appraisal Report/Document of the World Bank/32p.
21. 2003-2005 Medium Term Expenditure Framework of Armenia/132p.
22. Armenia/Restructuring to Sustain Universal General Education/Gilliam Perkins, Ruslan Yemtsov/March 2001/55p.
23. Education in Armenia/Yerevan-2002/64p.
24. United States Assistance to Armenia 2002/44p.

25. Growth, Inequality and Poverty in Armenia/UNDP/Keith Griffin, Yerevan, August 2002/95p.
26. Preliminary and Middle Professional Education in Armenia: Statistical Analysis, Armenian National Observatory, Yerevan, 2001/23p
27. Preparation of Reform Strategy for Higher and Technical Education, Peter van Engelshoven, European Training Foundation, Yerevan, 2001/40p.